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☐	L42	L37 and VVARSMGGKEDLIWELL	1
☐	L41	L37 and TTEDSIAKIMNGEADAMSLDGGF	1
☐	L40	L37 and SKLSMGSGLNLSEPN	1
☐	L39	L37 and YEKYLGEEYVKAV	1
☐	L38	L37 and anti-TNF	1
☐	L37	L36 and (carbohydrate)adj(deficient)adj(transferrin)	20
☐	L36	435/7.1,7.92,70.21,810,530/388.1,388.15,388.25.ccls.	18430
☐	L35	L31 and YEKYLGEEYVKAV	2
☐	L34	L31 and SKLSMGSGLNLSEPN	2
☐	L33	L31 and TTEDSIAKIMNGEADAMSLDGGF	2
☐	L32	L31 and VVARSMGGKEDLIWELL	2
☐	L31	L30 and (carbohydrate)adj(deficient)	91
☐	L30	L29 and transferrin	14441
☐	L29	antibod?	221874
		DB=USPT; PLUR=YES; OP=OR	
☐	L28	L27 and antibod?	5
☐	L27	L24 and transferin	5
☐	L26	L24 and (anti-transferin)	0
☐	L25	L24 and (transferin)adj(antibod?)	0
☐	L24	(436/548).ccls.	1180
☐	L23	L22 and (carbohydrate)adj(deficient)	12
☐	L22	L21 and transferrin	453
☐	L21	(435/7.1).ccls.	6708
☐	L20	L18 and (carbohydrate)adj(deficient)	1
☐	L19	L18 and (carbohydrate)adj(lacking)same(deficient)	0
☐	L18	L17 and transferrin	76
☐	L17	(435/70.21).ccls.	881
☐	L16	L15 and transferrin	7
☐	L15	L14 and alcoholic	60
☐	L14	(435/810).ccls.	1937
☐	L13	L11 and (carbohydrate)adj(deficient)	0

☐	L12	L11 and unglycosylated	8
☐	L11	L10 and transferrin	33
☐	L10	(530/388.24).ccls.	321
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
☐	L9	L8 and (CDT)	3
☐	L8	L7 and deficient	56
☐	L7	L6 and lacking	118
☐	L6	L5 and carbohydrate	231
☐	L5	anti-transferrin	538
☐	L4	(althaus)adj(harald)	24
☐	L3	(antibod?)same(carbohydrate)adj(deficient)adj(transferrin)	8
	DB=DWPI; PLUR=YES; OP=OR		
☐	L2	0605627	3
☐	L1	EP 0605627	1768793

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NEWS	21	FEB 26	TOXCENTER enhanced with reloaded MEDLINE
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NEWS	23	FEB 26	CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
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NEWS	26	MAR 20	MARPAT now updated daily
NEWS	27	MAR 22	LWPI reloaded
NEWS	28	MAR 30	RDISCLOSURE reloaded with enhancements
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=> s antibod?
L1     2934768 ANTIBOD?

=> s l1 and human transferin
L2           1 L1 AND HUMAN TRANSFERIN

=> d l2 cbib abs

L2   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2007 ACS on STN
1988:498646   Document No. 109:98646  Use of immunotoxin to inhibit
     proliferating human corneal endothelium.  Fulcher, Samuel; Lui, Geming;
     Houston, L. L.; Ramakrishnan, S.; Burris, Terry; Polansky, Jon; Alvarado,
     Jorge (Scott and White Clin., Scott and White Hosp., Temple, TX, 76508,
     USA).  Investigative Ophthalmology & Visual Science, 29(5), 755-9
     (English) 1988.  CODEN: IOVSDA.  ISSN: 0146-0404.
AB   Transferrin plays a central role in cellular proliferation and
     proliferating cells have been shown to express transferrin receptors with
     increased d.  The effect of an immunotoxin consisting of anti-transferrin
     receptor monoclonal antibody (454A12) conjugated to recombinant
     ricin A chain (rRTA) on the proliferation of human corneal endothelium
     (HCE) in vitro was studied.  In proliferating cultures an immunotoxin
     (454A12-rRTA) concentration of 50 ng/mL reduced cell counts at day 7 by at
least
     89%, with no effect observed at 0.01 ng/mL.  In contrast, cell counts were
     only minimally reduced in confluent cultures, even after 7 days' exposure
     to high concns. of immunotoxin.  454A12-rRTA may be used to prevent growth
     of human corneal endothelium in pathol. conditions such as the
     iridocorneal endothelial (ICE) syndrome.


=> s l1 and non-glycosylated transferrin
L3           1 L1 AND NON-GLYCOSYLATED TRANSFERRIN

=> d l3 cbib abs

L3   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2007 ACS on STN
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2004:17426 Document No. 140:56037 Anti-carbohydrate deficient transferrin (CDT) specific antibody and method for its production. Althaus, Harald (Dade Behring Marburg G.m.b.H., Germany). Eur. Pat. Appl. EP 1378521 A1 20040107, 21 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK. (German). CODEN: EPXXDW. APPLICATION: EP 2003-11334 20030519. PRIORITY: DE 2002-10230550 20020705.

AB The invention concerns antibodies to carbohydrate deficient transferrin (CDT) that bind to the following sequences in CDT: (1) WARSMGGKEDLIWELL ; (2) TTEDSIAKIMNGEADAMSLDGGF; (3) SKLSMGSGLNLSEPN; (4) YEKYLGEEYVKAV. The antibodies bind to CDT in aqueous solns. without a solid phase. For the production of monoclonal antibodies animals are immunized with non-glycosylated transferrin; spleen cells of the animals are fused with myeloma cells, thus antibody-producing hybrid cells are produced. The antibodies can be used for serodiagnosis of alc. patients.

=> s l1 and human transferrin
L4 1392 L1 AND HUMAN TRANSFERRIN

=> s l4 and carbohydrate deficient
L5 22 L4 AND CARBOHYDRATE DEFICIENT

=> s l5 and discontinuous epitope
L6 0 L5 AND DISCONTINUOUS EPITOPE

=> dup remove l5
PROCESSING COMPLETED FOR L5
L7 7 DUP REMOVE L5 (15 DUPLICATES REMOVED)

=> d l7 1-7 cbib abs

L7 ANSWER 1 OF 7 MEDLINE on STN DUPLICATE 1
2006037522. PubMed ID: 16331960. Differential susceptibility of transferrin glycoforms to chymotrypsin: a proteomics approach to the detection of carbohydrate-deficient transferrin. Valmu L; Kalkkinen N; Husa A; Rye P D. (Department of Clinical Chemistry, Biomedicum, University of Helsinki, PB 63, Haarmaninkatu 8, FIN-00014, Finland.) Biochemistry, (2005 Dec 13) Vol. 44, No. 49, pp. 16007-13. Journal code: 0370623. ISSN: 0006-2960. Pub. country: United States. Language: English.

AB Transferrin exhibits heterogeneity in glycosylation characteristic of pathological changes in alcohol abuse and congenital disorders in glycosylation. This study investigated an alternative approach in the detection of carbohydrate-deficient transferrin based on the premise that glycosylation may afford some degree of protection to proteolytic action. Differential susceptibility to proteolysis by chymotrypsin was demonstrated for normal glycosylated and nonglycosylated recombinant human transferrin, using reverse-phase (RP) HPLC, matrix-assisted laser desorption ionization time-of-flight (MALDI-TOF) mass spectrometry, and LC-tandem mass spectrometry (MS/MS). Peptide fragmentation profiles were consistent with a predominantly high-specificity cleavage pattern of chymotrypsin. The observed peptide fragmentation profile showed that the C-lobe of recombinant full-length nonglycosylated transferrin (rhTf-NG) appeared to be preferentially cleaved, while cleavage of the N-lobe was restricted to the N-terminal and link sequence regions. Although chymotryptic cleavage sites abound in the N-lobe, their resistance to cleavage was independent of glycosylation. Compared to previous studies of lactoferrin, our data suggest disparity in the role by which glycosylation exerts a protective effect in the siderophilin family. It was clear from the transferrin digestions analyzed by HPLC that N-linked glycosylation did confer protection from proteolysis by chymotrypsin. After fragmentation, a range of peptides representing previously cryptic epitopes were identified as potential

candidates for an immunological approach to differentiate between the different transferrin glycoforms. Based on its proximity to the Asn413 glycosylation site, a 15-mer peptide, m/z 1690.472 (NKSDNCEDTPEAGYF), was identified as a suitable candidate for raising anti-peptide antibodies for subsequent immunological detection. This novel approach could form the basis for an alternative assay or reference method for the detection of carbohydrate-deficient transferrin.

L7 ANSWER 2 OF 7 MEDLINE on STN DUPLICATE 2

2003517798. PubMed ID: 14578317. Analyte comigrating with trisialotransferrin during capillary zone electrophoresis of sera from patients with cancer. Ramdani Brahim; Nuyens Vincent; Codden Thierry; Perpete Gael; Colicis Jacques; Lenaerts Anne; Henry Jean-Pol; Legros Franz J. (University Department of Gastroenterology, Centre Hospitalier Universitaire de Charleroi, 92, Boulevard Janson, 6000 Charleroi, Belgium.) Clinical chemistry, (2003 Nov) Vol. 49, No. 11, pp. 1854-64. Journal code: 9421549. ISSN: 0009-9147. Pub. country: United States. Language: English.

AB BACKGROUND: Serum concentrations of monoglycosylated isoforms of transferrin are increased by chronic ethanol intake. We investigated transferrin glycosylation in patients with cancer, in which aberrant glycosylation is also induced. METHODS: We used a P/ACE 5000 series capillary zone electrophoresis (CZE) apparatus and a CZE carbohydrate-deficient transferrin reagent set to study 200 cancer patients who consumed alcohol moderately and 33 who were alcohol abusers; we then compared these patients with 56 healthy teetotalers, 89 moderate, and 112 excessive alcohol drinkers without known malignancies. Transferrin isoforms were identified by immunosubtraction with anti-human transferrin polyclonal antibody. RESULTS: Seven peaks, P0-P6, were visualized and completely or partly immunosubtracted when CZE separation was performed at pH 8.5. P0 was present in 95% of alcohol abusers with or without cancer. P3 was significantly higher in cancer patients and was only partly immunosubtracted as trisialotransferrin in all groups. The comigrating analyte was not altered by papain, precipitation by ethanol, or extraction by organic solvents, but was sensitive to acid hydrolysis, suggesting a polysaccharide structure. When isolated at pH 8.25, this analyte was higher in cancer patients. ROC curve analysis identified localized malignant neoplasia at P3 values above 5.8% of total transferrin (sensitivity, 0.78; specificity, 0.87), regardless of alcohol consumption. Disseminated cancers were better differentiated above 8% (sensitivity, 0.94; specificity, 0.96). CONCLUSIONS: Malignant neoplasia, unlike excessive ethanol intake, did not alter the addition of two N-glycans to transferrin. A peak comigrating with trisialotransferrin had characteristics of a polysaccharide in all adults and was increased in sera of patients with cancer.

L7 ANSWER 3 OF 7 EMBASE

2004019741 EMBASE Mass spectrometric analysis of human transferrin in different body fluids. Kleinert P.; Kuster T.; Durka S.; Ballhausen D.; Bosshard N.U.; Steinmann B.; Hanseler E.; Jaeken J.; Heizmann C.W.; Troxler H.. Dr. H. Troxler, Department of Pediatrics, Division of Clinical Chemistry, University of Zurich, Steinwiesstr. 75, 8032 Zurich, Switzerland. heinz.troxler@kispi.unizh.ch. Clinical Chemistry and Laboratory Medicine Vol. 41, No. 12, pp. 1580-1588 2003.
Refs: 27.
ISSN: 1434-6621. CODEN: CCLMFW
Pub. Country: Germany. Language: English. Summary Language: English.
Entered STN: 20040122. Last Updated on STN: 20040122

AB In this study, we present a versatile new procedure for the analysis of transferrin and its isoforms isolated from human body fluids such as serum, plasma, and cerebrospinal fluid. This method is based on a three-step procedure: (i) isolation of transferrins using anion-exchange

chromatography with UV detection; (ii) concentration of the transferrin fraction; (iii) detection of the transferrins with liquid chromatography-electrospray mass spectrometry. Pre-analytical sample procedures can be omitted and no immunoaffinity columns or transferrin-specific immunoassays were used. Anticoagulants such as heparin, EDTA, citrate, and oxalate do not interfere with our analysis. According to their respective molecular masses, up to ten different isoforms of transferrin could be identified in a serum sample from a patient with a congenital disorder of glycosylation type Ia (CDG-Ia). The method was successfully applied to different pathological samples from patients with CDG-Ia, CDG-Ib, CDG-Ic, CDG-Ie, CDG-If, and CDG-IIa. Additionally, samples from alcohol consumers that were found with turbidimetric immunoassay to contain increased levels of carbohydrate-deficient transferrin were analyzed.

L7 ANSWER 4 OF 7 MEDLINE on STN DUPLICATE 3

2002698680. PubMed ID: 12446474. Carbohydrate-deficient transferrin isoforms measured by capillary zone electrophoresis for detection of alcohol abuse. Legros Franz J; Nuyens Vincent; Minet Eddy; Emonts Philippe; Boudjeltia Karim Zouaoui; Courbe Anne; Ruelle Jean-Luc; Colicis Jacques; de L'Escaille Francois; Henry Jean-Pol. (Laboratory of Experimental Medicine, Universite Libre de Bruxelles and Centre Hospitalier Universitaire Andre Vesale, 706, route de Gozee, B6110 Montigny-le-Tilleul, Belgium.. franz.legros@chu-charleroi.be) . Clinical chemistry, (2002 Dec) Vol. 48, No. 12, pp. 2177-86. Journal code: 9421549. ISSN: 0009-9147. Pub. country: United States. Language: English.

AB BACKGROUND: Measurements of carbohydrate-deficient transferrin (CDT) are used as markers of alcohol abuse. We developed a capillary zone electrophoresis (CZE) method aimed at improving accuracy of CDT testing. METHODS: We studied 111 alcohol abusers with Alcohol Use Disorders Identification Test scores >11 and 50 teetotalers. CZE was performed with a P/ACE 5500, fused-silica capillaries, and a CEofix CDT reagent set. After iron saturation, sera were loaded by low-pressure injection, separated at 28 kV, and monitored at 214 nm. We identified the transferrin isoforms by migration times, treatment with 100 U/L neuraminidase, and immunosubtraction with anti-human transferrin and anti-C-reactive protein antibodies. We compared CZE results with current biological markers of alcohol abuse, including the %CDT turbidimetric immunoassay. RESULTS: Migration times of the isoforms were identical in both populations. Asialotransferrin was missing in teetotalers but present in 92% of alcohol abusers. Disialotransferrin was higher in those who consumed excessive amounts of alcohol, whereas mean trisialotransferrin concentration was not affected by alcohol abuse. At cutoffs to maximize sensitivity and specificity, these values were 0.92 and 1 [mean ROC area (MRa), 0.96; 95% confidence interval (CI), 0.93-0.99] for asialotransferrin; 0.84 and 0.94 for the sum of asialo- + disialotransferrin (MRa, 0.94; 95% CI, 0.91-0.98); 0.79 and 0.94 for disialotransferrin (MRa, 0.89; 95% CI, 0.84-0.94); 0.62 and 0.53 for trisialotransferrin (MRa, 0.58; 95% CI, 0.49-0.68); 0.79 and 0.82 for a 3% %CDT; and 0.83 and 0.69 for a 2.6% cutoff (MRa, 0.87; 95% CI, 0.81-0.92). Current markers lack sensitivity (<0.65). Transferrins were not significantly correlated with serum enzymes and mean erythrocyte volume. CONCLUSIONS: CZE-isolated desialylated transferrin isoforms allowed differentiation between chronic alcohol abusers and teetotalers.

L7 ANSWER 5 OF 7 MEDLINE on STN DUPLICATE 4

2002450452. PubMed ID: 12198372. Acetaldehyde-induced growth retardation and micro-heterogeneity of the sugar chain in transferrin synthesized by HepG2 cells. Searashi Yasuyuki; Yamauchi Masayoshi; Sakamoto Kazuhiko; Ohata Mitsuru; Asakura Tadashi; Ohkawa Kiyoshi. (Division of Gastroenterology and Hepatology, Jikei University School of Medicine, Tokyo, Japan.. searashi@pj8.so-net.ne.jp) . Alcoholism, clinical and experimental research, (2002 Aug) Vol. 26, No. 8 Suppl, pp. 32S-37S. Journal code: 7707242. ISSN: 0145-6008. Pub. country: United States. Language: English.

AB BACKGROUND: A carbohydrate-deficient transferrin (CDT) is the most useful marker of alcohol abuse; however, the mechanism of production and the pathophysiologic roles of CDT remain obscure. The effects of alcohol and its metabolites on growth and proliferation, transferrin synthesis, and phosphomannomutase enzyme activity in a human hepatoblastoma, HepG2, were examined. METHODS: HepG2 cells were treated with either ethanol at 80 mM or acetaldehyde at 400 microM. Transferrin secreted by the cells was prepared from conditioned culture medium by single-step immunoaffinity column chromatography using a goat-specific antibody against human transferrin. Phosphomannomutase and some related enzyme activities in the cell extracts were determined. Reverse transcription-polymerase chain reaction analysis of phosphomannomutase mRNA expression was also determined in HepG2 cultured with or without acetaldehyde (400 microM). RESULTS: HepG2 cells usually synthesized and secreted transferrin with three separated bands: main broad bands estimated to be 78 to 82 kDa, 75 kDa, and 72 kDa. The last two bands were compatible with part or the entire N-glycans-deficient transferrin (CDT) from alcoholic liver damage. Increased secretion of CDT from HepG2 correlated well with the extent of growth retardation to the level of confluent cell density. The activity of phosphomannomutase also decreased with prolongation of cellular doubling time. Furthermore, acetaldehyde treatment at 400 microM accelerated the inhibitory effect of cell growth compared with nontreated cells, and this condition facilitated CDT secretion from HepG2 cells. Determination of the enzyme activity and mRNA expression indicated that acetaldehyde showed competitive type inhibition of phosphomannomutase activity but not suppression of phosphomannomutase gene expression. CONCLUSIONS: By culturing HepG2 cells with acetaldehyde containing media, growth inhibition-dependent increase of CDT showed good correlation with reduced enzyme activity of phosphomannomutase. Acetaldehyde facilitated growth retardation, inhibition of phosphomannomutase activity, and increased secretion of CDT. The HepG2 cell line is useful as an in vitro model to investigate the pathophysiologic state of alcoholic liver damage and mechanisms of production as well as the physiologic role of CDT.

L7 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

2002:713613 Document No. 137:364746 Acetaldehyde-induced growth retardation and microheterogeneity of the sugar chain in transferrin synthesized by HepG2 cells. Searashi, Yasuyuki; Yamauchi, Masayoshi; Sakamoto, Kazuhiko; Ohata, Mitsuru; Asakura, Tadashi; Ohkawa, Kiyoshi (Division of Gastroenterology and Hepatology, Jikei University School of Medicine, Tokyo, Japan). Alcoholism: Clinical and Experimental Research, 26(8, Suppl.), 32S-37S (English) 2002. CODEN: ACRSDM. ISSN: 0145-6008. Publisher: Lippincott Williams & Wilkins.

AB Background: A carbohydrate-deficient transferrin (CDT) is the most useful marker of alc. abuse; however, the mechanism of production and the pathophysiol. roles of CDT remain obscure. The effects of alc. and its metabolites on growth and proliferation, transferrin synthesis, and phosphomannomutase enzyme activity in a human hepatoblastoma, HepG2, were examined Methods: HepG2 cells were treated with either ethanol at 80 mM or acetaldehyde at 400 μM. Transferrin secreted by the cells was prepared from conditioned culture medium by single-step immunoaffinity column chromatog. using a goat-specific antibody against human transferrin. Phosphomannomutase and some related enzyme activities in the cell exts. were determined Reverse transcription-polymerase chain reaction anal. of phosphomannomutase mRNA expression was also determined in HepG2 cultured with or without acetaldehyde (400 μM). Results: HepG2 cells usually synthesized and secreted transferrin with three separated bands: main broad bands estimated to be 78 to 82 kDa, 75 kDa, and 72 kDa. The last two bands were compatible with part or the entire N-glycans-deficient transferrin (CDT) from alc. liver damage. Increased secretion of CDT from HepG2 correlated well with the extent of growth retardation to the level of confluent cell d. The activity of phosphomannomutase also decreased with prolongation of cellular doubling

time. Furthermore, acetaldehyde treatment at 400 μM accelerated the inhibitory effect of cell growth compared with nontreated cells, and this condition facilitated CDT secretion from HepG2 cells. Determination of the enzyme activity and mRNA expression indicated that acetaldehyde showed competitive type inhibition of phosphomannomutase activity but not suppression of phosphomannomutase gene expression. Conclusions: By culturing HepG2 cells with acetaldehyde containing media, growth inhibition-dependent increase of CDT showed good correlation with reduced enzyme activity of phosphomannomutase. Acetaldehyde facilitated growth retardation, inhibition of phosphomannomutase activity, and increased secretion of CDT. The HepG2 cell line is useful as an in vitro model to investigate the pathophysiol. state of alc. liver damage and mechanisms of production as well as the physiol. role of CDT.

L7 ANSWER 7 OF 7 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

2001310384 EMBASE Online single-step analysis of blood proteins: The transferrin story. Bergen H.R.; Lacey J.M.; O'Brien J.F.; Naylor S.. S. Naylor, BMSFPF, Guggenheim C009B, Mayo Clinic, 200 First Street, SW, Rochester, MN 55905, United States. naylor.stephen@mayo.edu. Analytical Biochemistry Vol. 296, No. 1, pp. 122-129 1 Sep 2001.
Refs: 25.
ISSN: 0003-2697. CODEN: ANBCA2
Pub. Country: United States. Language: English. Summary Language: English.
Entered STN: 20010920. Last Updated on STN: 20010920

AB The serum iron transport protein human transferrin (hTf) is a glycoprotein (MW .apprx.79.6 kDa) containing two Asn-linked sites of glycosylation. The presence of specific glycoforms of hTf has been used as an indicator of carbohydrate-deficient glycoprotein syndrome (CDGS) or an indicator of alcohol abuse. The exact nature of the glycoforms described in the literature is controversial. In this work we demonstrate that the altered hTf glycoforms have lost one or both complete glycan side chains. Furthermore, we demonstrate using a combination of online immunoaffinity-postconcentration-mass spectrometry in conjunction with a blood spot cartridge that we can determine the relative quantities of the hTf glycoforms using <5 μL blood in under 30 min. This is in contrast to previous methods that used 1 mL and took 4 days. We show that this method can be useful to analyze hTf from CDGS and alcoholic patients. .COPYRGT. 2001 Academic Press.

=> s l1 and VVARSMGGKEDLIWELL
L8 0 L1 AND VVARSMGGKEDLIWELL

=> s l1 and TTEDSIAKIMNGEADAMSLDGGF
L9 1 L1 AND TTEDSIAKIMNGEADAMSLDGGF

=> d l9 cbib abs

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

2004:17426 Document No. 140:56037 Anti-carbohydrate deficient transferrin (CDT) specific antibody and method for its production. Althaus, Harald (Dade Behring Marburg G.m.b.H., Germany). Eur. Pat. Appl. EP 1378521 A1 20040107, 21 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK. (German). CODEN: EPXXDW. APPLICATION: EP 2003-11334 20030519. PRIORITY: DE 2002-10230550 20020705.

AB The invention concerns antibodies to carbohydrate deficient transferrin (CDT) that bind to the following sequences in CDT: (1) WARSMGGKEDLIWELL ; (2) TTEDSIAKIMNGEADAMSLDGGF; (3) SKLSMGSGLNLSEPN; (4) YEKYLGEEYVKAV. The antibodies bind to CDT in aqueous solns. without a solid phase. For the production of monoclonal antibodies animals are immunized with non-glycosylated transferrin; spleen cells of the animals are fused with myeloma cells,

thus antibody-producing hybrid cells are produced. The antibodies can be used for serodiagnosis of alc. patients.

=> s l1 and SKLSMGSGLNLSEPN
L10 1 L1 AND SKLSMGSGLNLSEPN

=> d l10 cbib abs

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
2004:17426 Document No. 140:56037 Anti-carbohydrate deficient transferrin (CDT) specific antibody and method for its production. Althaus, Harald (Dade Behring Marburg G.m.b.H., Germany). Eur. Pat. Appl. EP 1378521 A1 20040107, 21 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK. (German). CODEN: EPXXDW. APPLICATION: EP 2003-11334 20030519. PRIORITY: DE 2002-10230550 20020705.
AB The invention concerns antibodies to carbohydrate deficient transferrin (CDT) that bind to the following sequences in CDT: (1) WARSMGGKEDLIWELL ; (2) TTEDSIAKIMNGEADAMSLDGGF; (3) SKLSMGSGLNLSEPN; (4) YEKYLGEEYVKAV. The antibodies bind to CDT in aqueous solns. without a solid phase. For the production of monoclonal antibodies animals are immunized with non-glycosylated transferrin; spleen cells of the animals are fused with myeloma cells, thus antibody-producing hybrid cells are produced. The antibodies can be used for serodiagnosis of alc. patients.

=> s l1 and YEKYLGEEYVKAV
L11 1 L1 AND YEKYLGEEYVKAV

=> d l11 cbib abs

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
2004:17426 Document No. 140:56037 Anti-carbohydrate deficient transferrin (CDT) specific antibody and method for its production. Althaus, Harald (Dade Behring Marburg G.m.b.H., Germany). Eur. Pat. Appl. EP 1378521 A1 20040107, 21 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK. (German). CODEN: EPXXDW. APPLICATION: EP 2003-11334 20030519. PRIORITY: DE 2002-10230550 20020705.
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=> s l1 and WARSMGGKEDLIWELL
L12 1 L1 AND WARSMGGKEDLIWELL

=> d l12 cbib abs

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
2004:17426 Document No. 140:56037 Anti-carbohydrate deficient transferrin (CDT) specific antibody and method for its production. Althaus, Harald (Dade Behring Marburg G.m.b.H., Germany). Eur. Pat. Appl. EP 1378521 A1 20040107, 21 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK. (German). CODEN: EPXXDW. APPLICATION:

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=> s l1 and "DSM ACC2540"
L13 0 L1 AND "DSM ACC2540"

=> s l1 and "ACC2540"
L14 0 L1 AND "ACC2540"

=> s l1 and "DSM ACC2541"
L15 0 L1 AND "DSM ACC2541"

=> s (althaus h?/au)
L16 414 (ALTHAUS H?/AU)

=> s l16 and carbohydrate deficient transferrin antibod?
L17 1 L16 AND CARBOHYDRATE DEFICIENT TRANSFERRIN ANTIBOD?

=> d l17 cbib abs

L17 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
2004:17426 Document No. 140:56037 Anti-carbohydrate deficient transferrin (CDT) specific antibody and method for its production. Althaus, Harald (Dade Behring Marburg G.m.b.H., Germany). Eur. Pat. Appl. EP 1378521 A1 20040107, 21 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK. (German). CODEN: EPXXDW. APPLICATION: EP 2003-11334 20030519. PRIORITY: DE 2002-10230550 20020705.
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=>

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	96.60	96.81

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION